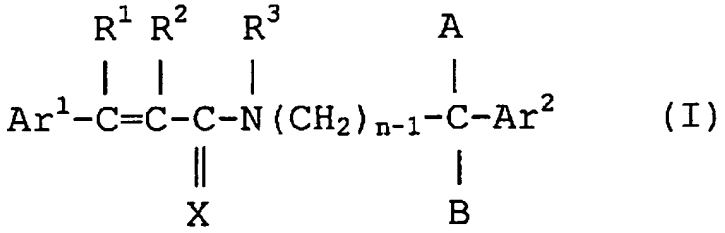
AMENDMENTS TO THE CLAIMS

CLAIMS 1-5 (CANCELLED)

6. (NEW) A method for inhibiting a phosphodiesterase IV comprising

(a) providing composition comprising a pyridylacrylamide derivative represented by the following formula (I):



(I)

wherein

Ar^1 represents a substituted or unsubstituted pyridyl group;

Ar^2 represents a substituted phenyl group that is substituted with at least 1 to 3 substituents selected from the group consisting of a C_{1-6} alkoxy group, a C_{2-6} alkenyloxy group, an aralkyloxy group, and an aryloxy group;

R^1 represents a hydrogen atom, a C_{1-6} alkyl group, or an aryl group;

R^2 represents a hydrogen atom, a C_{1-6} alkyl group, a cyano group, or a C_{1-6} alkoxy-carbonyl group;

R^3 represents a hydrogen atom or an optionally substituted C_{1-6} alkyl group;

X represents an oxygen atom or a sulfur atom;

A and B are the same or different from each other, and each independently represents a hydrogen atom, a hydroxyl group, a C_{1-6} alkoxy group or a C_{1-6} alkylthio group, or A and B together represent an oxo group, a thioxo group, a group represented by the following formula:

$=N-Y$

wherein Y represents a di-(C_{1-6} alkyl) amino group, a hydroxyl group, an aralkyloxy group, or a C_{1-6} alkoxy group, or a group represented by the following formula:

$-Z^1-M-Z^2-$

wherein, Z^1 and Z^2 are the same or different from each other, and each independently represents an oxygen atom, a sulfur atom, or an imino group that may be optionally substituted with a C_{1-6} alkyl group; and M represents an alkylene group having 2 to 4 chain members or a 1,2-phenylene group, or

A may be a hydroxyl group and B may be a 1-C_{1-6} alkyl-imidazol-2-yl group; and

n represents an integer from 1 to 3,

or a pharmaceutically acceptable salt thereof; and ,

(b) contacting the composition with the phosphodiesterase IV in an amount sufficient to inhibit the phosphodiesterase IV.

7. (NEW) The method of claim 6, wherein Ar^1 represents a substituted or unsubstituted pyridyl group; Ar^2 represents a substituted phenyl group that is substituted with at least 1 to 3 substituents selected from the group consisting of a C_{1-6} alkoxy group, a C_{2-6} alkenyloxy group, an aralkyloxy group, and an aryloxy group; R^1 represents a hydrogen atom, a C_{1-6} alkyl group, or an aryl group; R^2 represents a hydrogen atom, a methyl group, a cyano group, or a C_{1-6} alkoxy-

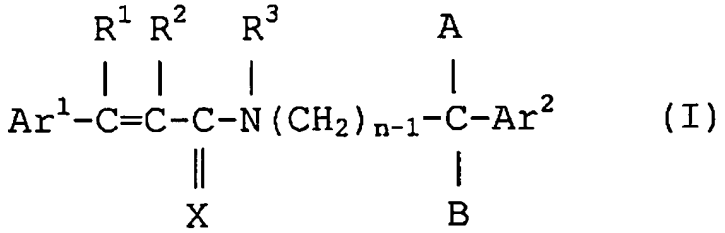
carbonyl group; R^3 represents a hydrogen atom or an optionally substituted C_{1-3} alkyl group; X represents an oxygen atom or a sulfur atom; A and B each independently represents a hydrogen atom, or A and B together represent an oxo group; provided that when A and B each independently represents a hydrogen atom, then n represents 1 or 2, and when A and B together represent an oxo group, then n represents 2.

8. (NEW) The method of claim 7, wherein Ar^2 represents a substituted phenyl group that is substituted with 1 to 3 C_{1-6} alkoxy groups, and R^3 represents a C_{1-3} alkyl group.

9. (NEW) The method of claim 6, wherein a substituted phenyl group represented by Ar^2 is further substituted with at least one member selected from the group consisting of a halogen atom, a hydroxyl group, an optionally substituted amino group, a substituted C_{1-6} alkoxy group, an optionally substituted C_{1-6} alkyl group, an aryl group, a C_{1-6} alkylthio group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a sulfamoyl group and a group -O-CO-R^4 (where R^4 represents a C_{1-6} alkyl group, an aryl group, a C_{1-6} alkoxy group, or an optionally substituted amino group).

10. (NEW) A method for treating or preventing a phosphodiesterase IV-involving disease comprising

(a) providing pharmaceutical composition comprising a pyridylacrylamide derivative represented by the following formula (I):



(I)

wherein

Ar^1 represents a substituted or unsubstituted pyridyl group;

Ar^2 represents a substituted phenyl group that is substituted with at least 1 to 3 substituents selected from the group consisting of a C_{1-6} alkoxy group, a C_{2-6} alkenyloxy group, an aralkyloxy group, and an aryloxy group;

R^1 represents a hydrogen atom, a C_{1-6} alkyl group, or an aryl group;

R^2 represents a hydrogen atom, a C_{1-6} alkyl group, a cyano group, or a C_{1-6} alkoxy-carbonyl group;

R^3 represents a hydrogen atom or an optionally substituted C_{1-6} alkyl group;

X represents an oxygen atom or a sulfur atom;

A and B are the same or different from each other, and each independently represents a hydrogen atom, a hydroxyl group, a C_{1-6} alkoxy group or a C_{1-6} alkylthio group, or A and B together represent an oxo group, a thioxo group, a group represented by the following formula:

$=N-Y$

wherein Y represents a di-(C_{1-6} alkyl) amino group, a hydroxyl group, an aralkyloxy group, or a C_{1-6} alkoxy group, or a group represented by the following formula:

$-Z^1-M-Z^2-$

wherein, Z^1 and Z^2 are the same or different from each other, and each independently represents an oxygen atom, a sulfur atom, or an imino group that may be optionally substituted with a C_{1-6} alkyl group; and M represents an alkylene group having 2 to 4 chain members or a 1,2-phenylene group, or

A may be a hydroxyl group and B may be a 1-C_{1-6} alkyl-imidazol-2-yl group; and

n represents an integer from 1 to 3,

or a pharmaceutically acceptable salt thereof; and ,

(b) administering the pharmaceutical composition in a pharmaceutically effective amount to a subject, thereby treating or preventing the phosphodiesterase IV-involving disease.

11. (NEW) The method of claim 10, wherein the phosphodiesterase IV-involving disease is selected from the group consisting of bronchial asthma, chronic bronchitis, atopic dermatitis, hives, allergic rhinitis, conjunctivitis, rheumatoid arthritis, gonarthrosis, septicemia, ulcerative colitis, manic-depressive psychosis, schizophrenia and Crohn's disease.

12. (NEW) The method of claim 10, wherein Ar^1 represents a substituted or unsubstituted pyridyl group; Ar^2 represents a substituted phenyl group that is substituted with at least 1 to 3 substituents selected from the group consisting of a C_{1-6} alkoxy group, a C_{2-6} alkenyloxy group, an aralkyloxy group, and an aryloxy group; R^1 represents a hydrogen atom, a C_{1-6} alkyl group, or an aryl group; R^2 represents a hydrogen atom, a methyl group, a cyano group, or a C_{1-6} alkoxy-carbonyl group; R^3 represents a hydrogen atom or an optionally substituted C_{1-3} alkyl group; X represents an oxygen atom or a sulfur atom; A and B each independently represents a hydrogen

atom, or A and B together represent an oxo group; provided that when A and B each independently represents a hydrogen atom, then n represents 1 or 2, and when A and B together represent an oxo group, then n represents 2.

13. (NEW) The method of claim 11, wherein Ar^2 represents a substituted phenyl group that is substituted with 1 to 3 C_{1-6} alkoxy groups, and R^3 represents a C_{1-3} alkyl group.

14. (NEW) The method of claim 10, wherein a substituted phenyl group represented by Ar^2 is further substituted with at least one member selected from the group consisting of a halogen atom, a hydroxyl group, an optionally substituted amino group, a substituted C_{1-6} alkoxy group, an optionally substituted C_{1-6} alkyl group, an aryl group, a C_{1-6} alkylthio group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a sulfamoyl group and a group -O-CO-R^4 (where R^4 represents a C_{1-6} alkyl group, an aryl group, a C_{1-6} alkoxy group, or an optionally substituted amino group).